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REMARKS

Claims 1 and 11 have been amended, claim 2 has been canceled, and new claims 12-17 have been added. Accordingly, claims 1 and 3-17 are now pending in the application.

Applicants appreciate the Examiner's indication that claim 4 is objected to and would be allowable if rewritten in independent form. Responsive to this indication, objected to claim 4 has been rewritten as independent claim 17. Accordingly, claim 17 is in condition for allowance.

Applicants do not understand the Examiner's identification of the specification as being "lengthy", since it is but nine pages long, including the claims and abstract. Of course, Applicants have again reviewed the specification for errors and have not noted any, but if the Examiner has identified any errors he is respectfully requested to point them out for correction.

Claims 1, 2, 3, 6, 7, 8, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kober et al. '879. Independent claim 1 has been amended to include the limitations of claim 2, which has been canceled, and also to clarify that the filter system divides a single input signal 102. In this manner, the claim is clearly and patentably distinguishable over the Kober et al. '879 patent, as well as the other references of record. It is worth noting, at this juncture, that the invention comprises a means for extending (multiplying) the bandwidth of analog-to-digital converters (ADC) without significant loss in dynamic range. This results in a general purpose ADC, or ADC multiplier with higher performance than can be realized in any other way, and which addresses the long-standing "jitter" limitation in state-of-the-art high speed ADC's. An important key to the invention is that the input signal is down converted after being filtered, and before being sampled. This is critical to overcoming the jitter limitation. Sampling before down conversion results in a loss in dynamic range at microwave frequencies due to aperture jitter. At microwave frequencies, the aperture jitter of the local oscillator is much less than that of a sampler.

The only embodiment of Kober et al. which down converts before sampling, as required in claim 1, as amended, is the embodiment of Fig. 12. However, in this

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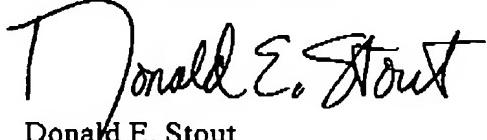
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embodiment, multiple signals come through multiple antennas, so there is no way to time align the signals, which is another important feature of the present invention (see page 3, lines 15-21). Since claim 1 recites only a single input signal, it is clear that claim 1 is patentable over the references of record.

Method claim 11 has been amended in a manner similar to that of claim 1, and is patentable for similar reasons.

In view of the foregoing, Applicants respectfully submit that the subject application is in condition for allowance, and early notification of same is earnestly solicited. The Examiner is requested to contact the undersigned at the number below, should any further questions or issues need to be resolved.

Respectfully submitted,



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